



## MIDDLE SCHOOL MATH GAME

NAME OF GAME: Scientific Notation Toss

STANDARD(S): Number Sense

Materials: 3 dice

Players: 2

### DIRECTIONS:

- Each player rolls the three dice. One number is used for the ones place, one number for the tenths place, and one number for the exponent.

☐ exponent

\_\_\_\_\_ · \_\_\_\_\_  
ones      tenths

The goal is to create the largest number possible.

- Each player rolls the 3 dice three times and writes each result in scientific notation.
- Players convert their numbers from scientific notation to standard notation. Next, players order their numbers from greatest to least.
- Players compare their number. The player who has the greatest number wins.

Example:

<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; width: 30px; text-align: center;">2</div> <div style="border: 1px solid black; padding: 5px; width: 30px; text-align: center;">5</div> <div style="border: 1px solid black; padding: 5px; width: 30px; text-align: center;">4</div> </div> <p style="text-align: center;">(dice)</p> <p><math>4.2 \times 10^5</math> 420,000</p>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; width: 30px; text-align: center;">6</div> <div style="border: 1px solid black; padding: 5px; width: 30px; text-align: center;">1</div> <div style="border: 1px solid black; padding: 5px; width: 30px; text-align: center;">4</div> </div> <p style="text-align: center;">(dice)</p> <p><math>4.1 \times 10^6</math> 4,100,000</p>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; width: 30px; text-align: center;">3</div> <div style="border: 1px solid black; padding: 5px; width: 30px; text-align: center;">4</div> <div style="border: 1px solid black; padding: 5px; width: 30px; text-align: center;">5</div> </div> <p style="text-align: center;">(dice)</p> <p><math>4.3 \times 10^5</math> 430,000</p>
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Variations:

- The exponent will be negative.
- Write the numbers in order from least to greatest. The player with the smallest number wins.